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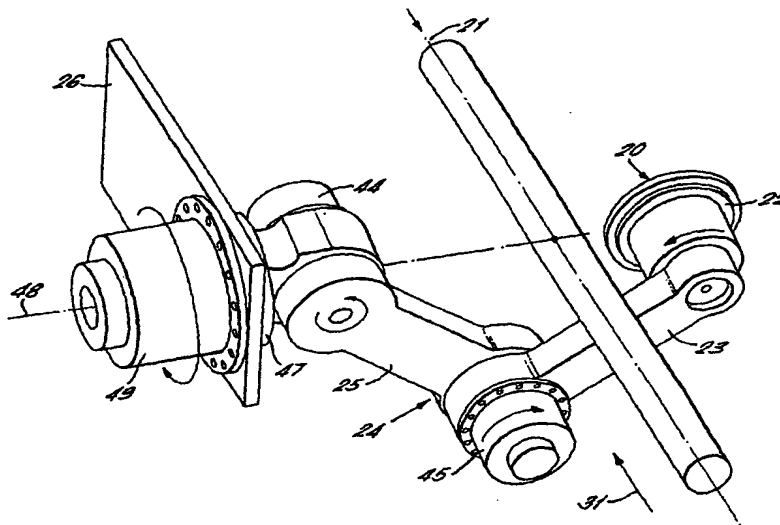
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(54) Title: MULTI DIRECTIONAL MECHANICAL SCANNING IN AN ION IMPLANTER



(57) Abstract: An end station for an ion implanter has a vacuum chamber (18) which receives an ion beam (19). The wafer holder (22) is mounted at the distal end (23) of a scanning arm (24) which has its proximal end (25) attached to the chamber wall (26). The scanning arm has at least two rotary joints (27, 28) providing articulation of the arm (24) to permit movement of the wafer holder in two orthogonal scan directions in a scan plane transverse to the beam path (21) through the vacuum chamber. A scanning arm driver moves the substrate holder in the scan plane in a desired two-dimensional scan pattern relative to the beam path.

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | US 5 194 748 A (AITKEN DEREK) 16 March 1993 (1993-03-16) column 7, line 48 - column 9, line 7; figure 5 | 1, 11 |
| A | US 5 898 179 A (FARLEY MARVIN ET AL) 27 April 1999 (1999-04-27) cited in the application the whole document | |
| A | US 5 956 077 A (QURESHI IQBAL ET AL) 21 September 1999 (1999-09-21) column 3, line 16 - line 40; figures | 1-11 |



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